Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-2 For each wire center building location that contains one or more end office switches, provide

a) the geographic coordinates (latitude-longitude or V-H coordinates) of that wire center; and

b) the CLLI codes of each switch in each wire center.

REPLY: Please see the attached document.

VZ # 63

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Michael J. Anglin
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-5 For each wire center identified in the response to Data Request No. 2, provide the average loop length and the total feeder and distribution route miles for that wire center, broken down by individual end office switch if that information is available. Provide all data, analyses, workpapers, and notes used to make this determination.

REPLY: Verizon MA does not maintain a database of average loop lengths by wire center. The loop lengths used in determining the TELRIC costs are based on a sample of wire centers. The attached worksheet summarizes the length data on a density zone basis.

VZ # 66

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-6 a) For each wire center identified in the response to Data Request No. 2, indicate whether or not there is also a tandem switch located in the same wire center building;

b) For each tandem identified in part (a), provide the CLLI for that tandem switch;

c) For each tandem identified in part (a), indicate whether the end office and tandem switching functions are provided by a single switch, or are provided by separate switches;

d) For any tandems located in buildings other than wire centers identified in the response to Data Request No. 2, identify the tandem by CLLI code and provide its geographic coordinates.

REPLY: a) The following Verizon Massachusetts access tandems are located within a wire center building:

CMBRMABE01T

FRMNMAUN04T

LWRNMACA03T

NWTNMAWA01T

SPFDMAWO01T

WRCSMACE03T

b) See Verizon MA's response to a above.

c) The tandem switching functions are provided by separate switches.

d) The following Verizon MA access tandems are located in buildings other than wire centers:

BRTNMACO03T

BRTNMACO04T

CMBRMA0118T

VZ # 67

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Michael J. Anglin
Title: Director
Respondent: John Livecchi
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-21 a) Provide Verizon's best estimation of the percentage of distribution plant that is, respectively, aerial, buried, and underground (in conduit). To the extent these percentages depend on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the percentages by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences;

b) Provide Verizon's best estimation of the percentage of copper feeder plant that is, respectively, aerial, buried, and underground (in conduit). To the extent these percentages depend on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the percentages by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences.

c) Provide Verizon's best estimation of the percentage of fiber feeder plant that is, respectively, aerial, buried, and underground (in conduit). To the extent these percentages depend on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the percentages by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences.

d) Provide Verizon's best estimation of the percentage of interoffice plant that is, respectively, aerial, buried, and underground (in conduit). To the extent these percentages depend on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the percentages by such demographic

environments, by wire center, or by other differentiators suitable for clearly portraying such differences.

For each of parts (a) through (d), provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that substantiate this information.

e) To the extent Verizon believes the forward-looking trend in any of the percentages of aerial, buried, and underground plant presented in parts (a) through (d) are towards a different mix of plant types, clearly identify such trends, present Verizon's rationale for why they are happening, and provide Verizon's best estimation of the new percentages that will result from these trends in the long run.

ITEM:

cont'd

REPLY: a. The structure percentages for distribution and feeder plant used in the study are taken from the sample and vary by route. The results are summarized in the attachment.

b. See Verizon MA's response to a above.

c. See Verizon MA's response to a above.

d. See Verizon MA's response to Information Request AT&T #2-43.

e. Verizon MA has not estimated any forward-looking trend which would suggest a different mix of plant types.

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: John Livecchi
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-23 Provide Verizon's best estimation of the average spacing between poles used to support aerial distribution, feeder, and interoffice cable, respectively. To the extent the spacing depends on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the spacing by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences. Provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that substantiate this information.

REPLY: Verizon MA's best estimation of spacing between poles, which was used as an input to the cost study is as follows:

Metro & Urban Zones 120 feet

Suburban Zone 135 feet

Rural Zone 150 feet

Verizon MA does not maintain a database that tracks actual pole spacing. The above estimates are based on the best judgement of Verizon MA's engineers.

VZ # 84

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Michael Anglin
Title: Director - Service Costs

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-24 a) Provide Verizon's best estimation of the percentage of distribution cable fill, that is, the average percentage of available pairs that are in use, and provide all planning guidelines, documentation, work papers, . . . used to arrive at this estimate. To the extent the fill depends on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the fill by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences.

b) Provide Verizon's best estimation of the percentage of copper feeder

cable fill, and provide all planning guidelines, documentation, work papers, . . . used to arrive at this estimate. To the extent the fill depends on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the fill by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences.

For parts (a) and (b) of this data request, provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on -- that substantiate this information.

c) Concerning the answers provided in Parts (a) and (b) of this Data Request, is it Verizon's contention that the current distribution and copper feeder fills reflect, respectively, the most economic cost of providing distribution and feeder plant? If so, provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that establish why Verizon believes the current fills to be the most economic ones. If not, indicate what Verizon believes to be the likely fills for distribution cable and copper feeder cable that will represent the most economic cost. Clearly indicate all factors and considerations that will cause the current fills to change, and provide all

available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - associated with Verizon's determination of the most economic fills for distribution cable and copper feeder cables.

REPLY: ATT 2-24 (cont'd)

a. Verizon MA does not maintain records of actual distribution fill. The Company's best estimate of the forward-looking distribution fill is 40%. The rationale for this estimate is described in the Direct Panel testimony.

b. Verizon's best estimation of copper feeder cable fill is 55.20%. This estimate is based on data extracted from the LART database to determine the plant characteristics used in Verizon MA's TELRIC study. The attached worksheet details the development of this value.

c. Referring to part (a), Verizon MA does contend that the actual percent distribution fill reflects the most economic cost of providing distribution plant in a forward-looking network. This is described in the Panel Testimony, beginning on line 9, page 82 and ending on line 15, page 87. Distribution cables are sized for long-term demand, since in most situations (such as in buried plant) the cost of supplementing the plant is prohibitive - trenching

and restoral costs. Referring to part (b), again Verizon MA does assert that the existing copper cable fills reflect the most economic cost of providing copper feeder plant in a forward looking network. The reasoning is described in detail in the Panel testimony - lines 3 through 18 on page 88. In a forward-looking network, copper deployment would be limited to short loops. Over time, the fills would be expected to grow to the percentages reflected in today's network, where copper has been the primary means of provisioning telephony for decades.

VZ # 85

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

REQUEST: AT&T Communications of New England, Inc., Set #2

DATED: May 8, 2001

ITEM: ATT 2-28 To the extent Verizon incurs additional site preparation, engineering, and/or installation costs associated with DLC systems above and beyond what it pays manufacturers, provide the relationship between the installed cost of DLCs and the discounted price of the SAIs. To the extent such additional costs depend on the size or type of DLC installed, provide such information for the full range of DLC sizes and types Verizon commonly deploys in its network. Also, to the extent this relationship depends on the population demographics involved - that is, whether a DLC is being installed in rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the answer by such demographic environments, by wire center, or by other differentiators suitable for clearly portraying such differences. The answers may be supplied as a ratio or ratios, or in other suitable form. Provide all available data and documentation - statistical data, planning guidelines, loading factors, studies, analyses, workpapers, and so on - that substantiate this information.

REPLY: Please see the attached documents.

Attachment 1 shows the costs associated with the various DLC systems used in developing the TELRIC costs as well as the associated site preparation and installation costs.

Attachment 2 (Proprietary) and Attachment 3 (Proprietary) show the detailed calculations supporting these costs. Verizon MA considers these attachments to be proprietary and competitively sensitive. These documents will be made available to the extent provided for in a mutually agreeable Protective Agreement.

VZ # 89

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20(Part A)

Respondent: John Livecchi
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-29 Provide Verizon's best estimate of the degree to which the feeder and interoffice parts of its network share outside plant support structures. State the answer in terms of route miles shared, saved investment in support structures, or other reasonable measures that Verizon can define and quantify clearly. To the extent the amount of sharing depends on the population demographics involved - that is, rural, semi-rural, suburban, urban, downtown business district, etc. - separately specify the sharing by such demographic environments, by wire center, or by other differentiators

suitable for clearly portraying such differences. Provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that substantiate this information.

REPLY: Verizon MA does not currently maintain a mechanized system that records structure sharing of interoffice and loop facilities. Therefore, Verizon MA cannot respond to this request.

VZ # 90

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-32 Does Verizon currently plan to make any additional end office switch purchases within the next two years? If "yes," please provide the EF&I price Verizon, or its purchasing subsidiary or affiliate, plans to pay. Please also provide any correspondence with switch manufactures regarding its intended purchases. For each planned switch purchase please also provide Verizon's estimated cost on a per line basis. If the per-line cost differs by the size and/or type of the switch, describe that relationship -- that is, the price per line as a function of the number of lines in a switch, and/or as a function of whether the switch is a host, remote, or stand-alone switch.

Identify the engineering and installation costs separately from the price of the switch itself. For each planned switch purchase listed, please also provide the total planned switch capacity in terms of total lines, total trunks and total call attempts per busy hour. Provide all available data and documentation -- invoices, purchase orders, correspondence with manufacturers, work papers, and so on -- that substantiate this information.

REPLY: At this time, Verizon MA has no plans to purchase new end office switches.

VZ # 93

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-33 Please provide Verizon's best available estimation of its percent of completed calls (as opposed to calls dialed but not completed) for the year 1999, and for 2000 if the information is available. To the extent possible,

please provide the requested data both at a total level and disaggregated into local, intraLATA and interLATA categories. Please also supply copies of all data, documentation, workpapers, studies, and analyses that Verizon used to develop its response to this request.

REPLY: Verizon MA objects to this request on the grounds that the request is overly broad and vague and would require a burdensome and time consuming special study to produce such an estimate.

VZ # 94

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-36 Please provide Verizon's best available estimation of its average end office switch processor utilization by end office switch, and the statewide average end office switch processor utilization, for 1999, and for 2000 if the information is available. Please also supply copies of all data, documentation, workpapers, studies, and analyses that Verizon used to develop its response to this request.

REPLY: Verizon MA objects to this request on the grounds that the request is overly broad and vague and would require a burdensome and time consuming special study to develop such an estimate.

VZ # 97

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-37 Please provide Verizon's best available estimation of its average tandem switch processor utilization by individual tandem switch, and its statewide average tandem processor utilization, for the year 1999, and for 2000 if the information is available. Please also supply copies of all data, documentation, workpapers, studies, and analyses that Verizon used to develop its response to this request.

REPLY: Verizon MA objects to this request on the grounds that the request is overly broad and vague and would require a burdensome and time consuming special study to develop such an estimate.

VZ # 98

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-38 Please provide Verizon's best available estimation of its percent utilization of equipped line capacity by end office switch, and the statewide average percent utilization of equipped line capacity, for the year 1999, and for 2000 if the information is available. Please also supply copies of all data, documentation, workpapers, studies, and analyses that Verizon used to develop its response to this request.

REPLY: Verizon MA objects to this request on the grounds that the request is overly broad and vague and would require a burdensome and time consuming special study to develop such an estimate. Notwithstanding this objection, Verizon MA provides the following response.

Please see Verizon MA's response to Information Request ATT 2-2 that contains VZ-MA equipped line capacity utilization as of May 2001, for each of its end office switches.

VZ # 99

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-39 Please provide Verizon's best available estimation of its percent utilization of ultimate line capacity by end office switch, and the statewide average percent utilization of ultimate line capacity, for the year 1999, and for 2000 if the information is available. Please also supply copies of all data, documentation, workpapers, studies, and analyses that Verizon used to develop its response to this request.

REPLY: Verizon MA objects to this request on the grounds that the request is overly broad and vague and would require a burdensome and time consuming special study to develop such an estimate.

VZ # 100

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Donald Albert
Title: Director

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-40 a) Does Verizon agree that the appropriate forward-looking architecture for its interoffice network involves in every case the use of fiber optics rings connecting different end office and tandem offices to each other? To the extent Verizon believes there is an alternative architecture that should apply in some cases, provide a complete description of the alternative architecture and specify in which cases it would be more appropriate to use that architecture rather than using fiber optics rings.

b) To what extent has Verizon implemented its forward-looking interoffice network architecture? The answer can be specified in terms of the percentage of interoffice trunks that are implemented on the forward-looking architecture compared to the total population of interoffice trunks, or by other measure Verizon defines.

c) To the extent Verizon is making use of interoffice fiber rings, are they implemented as Bi-directional Line Switched Rings (BLSR) on two fibers, BLSR on four fibers, or another configuration? If Verizon makes use of a mix of configurations, please define the criteria used to determine which configuration is appropriate to use in a given circumstance.

With respect to the answers to parts (a) through (c), provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that substantiate this information.

REPLY: a) No. Please see Verizon MA's cost study filed in this proceeding.

b) 86% percent of Verizon New England's IOF capacity is SONET based; 14% of Verizon New England's IOF capacity is Asynchronous.

c) Bi-directional rings on two fibers.

VZ # 101

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Nancy Matt
Title: Manager - Service Costs

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-43 Please state the assumptions used by the Verizon cost study for each of the following. To the extent the assumptions depend on a particular ring configuration, demographic area, or the like, identify such dependencies and provide the requested information for each such differentiator.

a) The percentage mix of aerial, buried, and underground interoffice cable

b) The cost per foot for placing interoffice cable on or in each kind of structure.

c) the spacing of repeaters on interoffice transport facilities

d) the spacing of manholes, pull boxes, or other such structures assumed by the study.

e) The average busy-hour CCS per trunk.

Provide all available data and documentation - statistical data, planning guidelines, studies, analyses, workpapers, and so on - that substantiate this information.

REPLY: a) The percentage of aerial, buried, and underground fiber is based on the actual fiber miles of each. This can be found in the MA01-20 IOF Invest.xls file, Parameters tab, page 1, lines 32-34. The source of this data is the 2000 - QR7A EOY Report, page 2, lines 54, 57, 60, attached.

b) The fiber investments per sheath foot can be found in the MA01-20 IOF

Invest.xls file, Parameters tab, page 1, L21D (aerial); L25D (Underground); and L28D (buried). The source of these investments is the LCAM Model, used in the development of the loop costs.

c) The study assumes no repeaters on interoffice transport facilities.

REPLY: ATT 2-43

(cont'd)

d) The pole spacing can be found in the Loop Study, Section 5.8 - 120 feet Metro & Urban; 135 feet Suburban; and 150 feet Rural.

The manhole spacing can also be found in the Loop Study. Manholes investments are included in the conduit investments in the Loop Study. The manhole spacing is 250 feet for Metro and 700 feet for Urban, Suburban, and Rural.

e) The IOF cost study makes no assumptions concerning the CCS carried per trunk.

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Michael J. Anglin
Title: Director - Service Costs

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-48 What is Verizon's average annual wholesale customer service cost per UNE line it provides? Provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that substantiate this information. If appropriate, Verizon can reference the section of its cost study documentation that answers this question and/or provides the requested support for this quantity.

REPLY: The annual wholesale customer service expense (Account 6623) included in Verizon MA's cost study is $156,584,633. This figure is part of the development of the Wholesale Marketing Factor. The details supporting the development of this expense factor can be found in Part G-4 of the workpapers attached to the Panel Testimony. As explained in the Panel Testimony, the expenses included in the development of this factor are regional totals, and are not specific to Massachusetts.

Verizon MA does not fully understand what is meant by "UNE line" in the above request. In any event, wholesale customer service expenses are not expressed on a per line basis in the cost study. They are part of a factor that is applied to all TELRIC investments.

VZ # 109

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Michael J. Anglin
Title: Director - Service Costs

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-49 What degree of sharing of outside plant support structure with other utilities is assumed by the Verizon cost study to be appropriate in a model of forward-looking economic costs? To the extent appropriate, separately specify the answer for type of structure (aerial, buried, underground), outside plant component (distribution, feeder, interoffice), and/or demographic area (rural, suburban, urban, central business district). Provide all available data and documentation - statistical data, planning guidelines, studies, analyses, work papers, and so on - that substantiate this information. If appropriate, Verizon can reference the section(s) of its cost study documentation that answers this question and/or provides the requested support for this quantity.

REPLY: The appropriate percentage of pole investment shared with other utilities in a model of forward-looking economic cost is assumed to be fifty percent (50%) for feeder, distribution, and interoffice cable. The percent of pole investment is based on Verizon's joint ownership agreements with power companies in the State of Massachusetts. This value is understated because it does not recognize a small percentage of sole owned telephone poles.

Conduit investment is input into the study on a per duct foot basis and does not

assume any shared ownership with other utilities. Buried cable investment is input into the study on a per sheath foot and does not assume any shared ownership of trenches with other utilities.

Pole and conduit annual carrying charge factors are reduced by the pole and conduit rental fees charged to parties attaching to the respective plant investment. See Part G-5, Network Factor Development.

VZ # 110

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-20 (Part A)

Respondent: Michael J. Anglin
Title: Director - Service Costs

REQUEST: AT&T Communications of New England, Inc., Set #2
DATED: May 8, 2001

ITEM: ATT 2-51 To the extent Verizon asserts that the HM 5.2a-MA produces investments for particular portions of the network that are too low, specifically identify the comparable investment estimated by the Verizon cost study. Please also supply copies of all data, documentation, workpapers, studies, and analyses that Verizon used to arrive at its conclusion, specifically identifying what steps Verizon has taken to ensure that it is making an apples-apples comparison between the HM 5.2a-MA results and its own cost studies.

REPLY: Verizon MA objects to this question on the grounds that it is premature to respond to in discovery. Since Verizon MA is currently reviewing AT&T's cost

model that was filed on May 8th, Verizon intends to address AT&T's Hatfield Model in Verizon MA's Rebuttal testimony.

VZ # 112